

REMARKS

Applicant respectfully requests reconsideration of this application. Claims 37-54 are pending.

Claims 37-54 have been amended. No claims have been cancelled. Claims 55-58 has been added.

Therefore, claims 37-58 are now presented for examination.

Claim Rejections under 35 U.S.C. §101

The Examiner rejected claims 49-54 under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Without any concession regarding the substance of the rejection, claims 49-54 have been amended to refer to a computer-readable medium comprising instructions executed by a processor. In addition, paragraph 0051 has been amended to provide clarification regarding the medium. (Note: The paragraph numbering used in the amendment follows the paragraph numbering of published application 2003/0123393. This may not follow the paragraph numbering of the original application filing.)

Claim Rejections under 35 U.S.C. §102

The Examiner rejected claims 37, 41-43, 47-49 and 53-54 under 35 U.S.C. 102(e) as being disclosed by U.S. Patent No. 6,859,435 of Lee ("*Lee*").

It is submitted that *Lee* does not contain all elements of the rejected claims. For example, claim 37, as amended herein, is as follows:

37. A method comprising:
receiving a plurality of Ethernet frames for transmission at a
device, the device including an enhanced network interface;

receiving a control message from a first Ethernet switch, the first Ethernet switch including the enhanced network interface, the control message identifying a priority level from among a plurality of priority levels for transmissions to the first Ethernet switch;

identifying one or more of the plurality of Ethernet frames that are to be transmitted to the first network switch and determining the identified priority level for the first Ethernet switch from the control message; and

based on the control message, pausing transmission to the first Ethernet switch of Ethernet frames that are associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level..

In particular, it is submitted that *Lee* does not provide for identifying one or more of the plurality of Ethernet frames that are to be transmitted to the first network switch and determining the identified priority level for the first Ethernet switch from the control message. Further, the reference does not provide for receiving a plurality of Ethernet frames for transmission at a device that include an enhanced network interface, and receiving a control message from a first Ethernet switch that includes the enhanced network interface.

Lee regards the prevention of deadlocks and livelocks in lossless, backpressured packet networks. Within the *Lee* reference, there is extensive discussion regarding priority levels that are assigned to packets. In this discussion, the reference provides the following:

The receiving node R_i thereafter monitors the priority levels λ^d of arriving and departing packets, and the increasing of priority levels λ_p of previously-stored packets, and thus keeps track of the total space in the buffer at R_i occupied by packets of various priority levels λ^d . The feedback f_i sent from the receiving node R_i to the sending node X_i represents the lowest priority level of packets that the receiving node R_i could accept without violating any of the B_i buffer threshold constraints. In other words, the receiving node R_i has room to accept packets of priority level $(1+f_i)$ or greater, without violating any of the buffer threshold constraints, but the receiving node R_i cannot accept packets of priority level f_i or lower because it could possibly cause one or more of the buffer threshold constraints to be violated.

(*Lee*, col. 5, line 62, to col. 6, line 8). Thus, *Lee* addresses the monitoring of priority levels of arriving and departing packets. In addition, the reference discusses feedback sent from receiving node to a sending node, where the feedback represents the lowest priority level of packets that the receiving node can accept without violating any buffer threshold restraints.

However, it is submitted that this does not address all elements of claims 37. The majority of the reference is not actually concerned with the receipt or transmission of data, but is rather concerned with the establishment and updating of priorities. However, it is emphasized that the discussion of priority determination relates to the priority level that applies to each data packet, not the priority level that relates to a particular device that is receiving the data packet. While *Lee* addresses the transmission of data between devices, the discussion is very limited, and does not address the issues contained in the claims. For example, Figure 9 of the reference provides only two steps for send functions at a Node X_i , and describes the operation as follows:

FIG. 9 is a flow chart illustrating the send functions performed at a sending node X_i . In step 901, a determination is made as to which packets are eligible for transmission over link l_i , by determining if the priority level for a packet is greater or equal to the feedback level, or $\lambda_p \geq f_i$, as in Equation 1. Any arbitrary scheduling algorithm S_i is then used to select the next packet for transmission from among those that are eligible, in step 903, whereupon the process of FIG. 9 returns and repeats step 901.

(*Lee*, col. 13, lines 32-40) (*emphasis added*). Thus, the reference refers only to determinations regarding the eligibility of packets for transmission, which is a comparison of a priority of a packet to a feedback level, but does not address operations to identify which data packets are destined to a device, or to determine a priority level that would relate to such a device.

In this regard, it is noted that new claim 58 further includes a management data structure that includes a plurality of destination identifier entries and a priority entry for each of the destination identifier entries, where the system is to utilize the management data structure to identify the priority level for the first Ethernet switch. It is submitted that *Lee* does not include the elements of claim 58.

Further, claim 37 also provides for receiving Ethernet frames at a device, where the device includes an enhanced network interface, and describes the first Ethernet switch as including the enhanced network interface. Thus, the claim provides for transactions between devices containing an enhanced Ethernet interface. It is submitted that *Lee* does not include these elements. Further, it is noted that new claim 57 provides that the system further comprises a link to a second Ethernet switch that is not compatible with the enhanced network interface, and provides that the system is to operate in conjunction with the second Ethernet switch without regard to the priority level of Ethernet frames. It

is submitted that *Lee* does not include any teaching with regard to such compatibility of other devices.

It is submitted that the arguments presented above with regard to claim 37 are also applicable to independent claims 43 and 49. The remaining claims, while having other differences with the cited references, and dependent claims and are allowable as being dependent on the allowable base claims.

Claim Rejection under 35 U.S.C. §103

Lee in view of Williams et al.

The Examiner rejected claims 38-40, 44-46 and 50-52 under 35 U.S.C. 103(a) as being unpatentable over *Lee* in view of U.S Patent Publication No. 2002/0087723 of Williams et al. ("*Williams*") (now issued as 6,957,269, October 18, 2005).

The rejected claims are dependent claims, and, while having other differences with the cited art, are dependent claims and are allowable as being dependent on the allowable base claims.

Lee has been discussed above. It is submitted that *Williams* does not contain any teaching or reasonable suggestion of the elements shown to be missing from *Lee*. Thus, it is submitted that neither of the cited references contain the elements of the claims, and the claims are thus patentable over the cited references.

Williams includes discussion of "[a] network device that controls the communication of data frames between stations receive[d] data frames having different priorities." (*Williams*, abstract). *Williams* further discloses that the network device includes "output control queues . . . [that] include multiple priority queues for frames having different level of priority." (*Williams*, col. 5, lines 34-38). *Williams* further

modifies the standard MAC control to include a “priority field . . . to advantageously enable . . . selectively suspend[ing] data transmissions.” (col. 7, lines 57-58).

However, the discussion of operation for sending data is limited. For example, Figure 5 includes designated stations receiving the MAC control pause frame and identifying the priority information (element 560), and stations stopping transmitting data frames of the designated priority for the period of time that is defined in the parameters field. (See *Williams*, ¶0048) However, it does not appear that the elements shown to be missing from *Lee* with regard to the transmission of data are taught or reasonably suggested by *Williams*.

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicant respectfully requests the rejections be withdrawn and the claims as amended be allowed.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (503) 439-8778 if there remains any issue with allowance of the case.

Request for an Extension of Time if Needed

The Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be needed. Please charge any fee to our Deposit Account No. 02-2666.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: March 18, 2008

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